Monal Application No

PCT/EP2004/006613 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A23L1/29 A23L A61K31/202 A23L1/305 A61K35/74 A23L1/30 According to international Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A23L A61K IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS, FSTA, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category • Citation of document, with indication, where appropriate, of the relevant passages EP 0 231 904 A (MILUPA AG) Y 1-19 12 August 1987 (1987-08-12) page 2, lines 5-10; claims 1-6 Y US 2002/004527 A1 (0' CONNOR DEBORAH L ET 1-19 AL) 10 January 2002 (2002-01-10) pages 1-10; claims 1-21 Y 1 - 19US 2003/060509 A1 (ELSWYK MARY VAN) 27 March 2003 (2003-03-27) page 1, paragraph 2; claim 41 page 4, paragraph 52-58 page 6, paragraph 84 1-5 US 5 374 657 A (KYLE DAVID J) 20 December 1994 (1994-12-20) column 1, lines 29-38; claims 1-22; examples 4-6 Patent family members are listed in annex. Further documents are listed in the continuation of box C. lχ Special categories of cited documents: \*T\* tater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention BEST AVAILABLE COPY \*A\* document defining the general state of the art which is not considered to be of particular relevance \*E\* earlier document but published on or after the International filling date "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority daim(s) or which is clied to establish the publication date of another dtation or other special reason (as specified) "Y" document of particular relevance; the claimed invention concurrent or particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 11/10/2004 30 September 2004 Name and mailing address of the ISA **Authorized officer** European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016

De Jong, E

Internal Application No PCT/EP2004/006613

C /Contler	etion) DOCUMENTS CONSIDERED TO BE RELEVANT	PC1/EP2004/006613
	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/017192 A1 (KANAFANI HANNY ET AL) 23 January 2003 (2003-01-23) page 1, paragraphs 5,6; claims 1-25; example 3	1-19
Y	EP 0 904 784 A (NUTRICIA NV) 31 March 1999 (1999-03-31) column 8, paragraph 58 - column 9, paragraph 64; example 7	1-19
Υ	WO 02/15719 A (NESTLE SA) 28 February 2002 (2002-02-28) example 6	1
Y	US 2003/077255 A1 (SABHARWAL HEMANT K) 24 April 2003 (2003-04-24) page 2, paragraphs 10,14; claims 1-12 page 1, paragraphs 3,7	1,6, 14-16
Y	OGATA T ET AL: "EFFECT OF BIFIDOBACTERIUM LONGUM BB536 YOGHURT ADMINISTRATION ON THE INTESTINAL ENVIRONMENT OF HEALTHY ADULTS" MICROBIAL ECOLOGY IN HEALTH & DISEASE, CHICHESTER, GB, vol. 11, no. 1, March 1999 (1999-03), pages 41-46, XP009023764 the whole document	7,10, 14-19
Y	GRILL J P ET AL: "Bifidobacteria and probiotic effects: action of Bifidobacterium species on conjugated bile salts."  CURRENT MICROBIOLOGY. JUL 1995, vol. 31, no. 1, July 1995 (1995-07), pages 23-27, XP008036111 ISSN: 0343-8651 the whole document	7,10, 14-19
Y	ISOLAURI E ET AL: "Probiotics in the management of atopic eczema." CLINICAL AND EXPERIMENTAL ALLERGY: JOURNAL OF THE BRITISH SOCIETY FOR ALLERGY AND CLINICAL IMMUNOLOGY. NOV 2000, vol. 30, no. 11, November 2000 (2000-11), pages 1604-1610, XP002298117 ISSN: 0954-7894 the whole document	8-10, 14-19
Y	WO 02/060276 A (MAEYRAE-MAEKINEN ANNIKA; SUOMALAINEN TARJA (FI); VALIO LTD (FI); VAAR) 8 August 2002 (2002-08-08) the whole document	8-10, 14-19

Form PCT/ISA/210 (continuation of second sheet) (January 2004)

Interpenal Application No PCT/EP2004/006613

Chailon of document, with inclication, where appropriate, of the relevant passages  SAXELIN M: "LACTOBACILLUS GG — A HUMAN PROBIOTIC STRAIN WITH THOROUGH CLINICAL DOCUMENTATION" FOOD REVIEWS INTERNATIONAL, NEW YORK, NY, US, vol. 13, no. 2, 1997, pages 293—313, XP000199732 the whole document  KALLIOMAKI M ET AL: "Probiotics and prevention of atopic disease: 4—year follow—up of a randomised placebo—controlled trial" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 361, no. 9372, 31 May 2003 (2003—05—31), pages 1869—1871,	8-10, 14-19
SAXELIN M: "LACTOBACILLUS GG — A HUMAN PROBIOTIC STRAIN WITH THOROUGH CLINICAL DOCUMENTATION" FOOD REVIEWS INTERNATIONAL, NEW YORK, NY, US, vol. 13, no. 2, 1997, pages 293-313, XP000199732 the whole document  KALLIOMAKI M ET AL: "Probiotics and prevention of atopic disease: 4-year follow-up of a randomised placebo-controlled trial" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 361, no. 9372,	8-10, 14-19
PROBIOTIC STRAIN WITH THOROUGH CLINICAL DOCUMENTATION" FOOD REVIEWS INTERNATIONAL, NEW YORK, NY, US, vol. 13, no. 2, 1997, pages 293-313, XP000199732 the whole document  KALLIOMAKI M ET AL: "Probiotics and prevention of atopic disease: 4-year follow-up of a randomised placebo-controlled trial" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 361, no. 9372,	14-19 8-10,
prevention of atopic disease: 4-year follow-up of a randomised placebo-controlled trial" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 361, no. 9372,	
XP004428374 ISSN: 0140-6736 the whole document	
EP 1 048 226 A (NESTLE SA) 2 November 2000 (2000-11-02) claims 1-4; examples 1,2	1,2,4, 11-13,17
KANKAANPAA P E ET AL: "The influence of polyunsaturated fatty acids on probiotic growth and adhesion." FEMS MICROBIOLOGY LETTERS 194 (2) 149-153 2001 DEP. OF BIOCHEM. & FOOD CHEM., UNIV. OF TURKU, 20014 TURKU, FINLAND. TEL. +358 (2) 333 6873. FAX +358 (2) 333 6860. E-MAIL PAERKA(A)UTU.FI, 2001, XP002261972 pages 152-153	1,2,4
DE 102 19 684 A (FRIEDRICH BUESE CONSULTING GMB ;UNTERNEHMENSBERATUNG REICHENAU (DE) 14 November 2002 (2002-11-14) claims 1,10	1,2,4
EP 0 880 902 A (NESTLE PRODUKTE AG) 2 December 1998 (1998-12-02) cited in the application the whole document	11
DE 202 02 562 U (ORTHOMOL PHARMAZEUTISCHE VERTR) 23 May 2002 (2002-05-23) claims 1,2	6
	ISSN: 0140-6736 the whole document  EP 1 048 226 A (NESTLE SA) 2 November 2000 (2000-11-02) claims 1-4; examples 1,2  KANKAANPAA P E ET AL: "The influence of polyunsaturated fatty acids on probiotic growth and adhesion." FEMS MICROBIOLOGY LETTERS 194 (2) 149-153 2001 DEP. OF BIOCHEM. & FOOD CHEM., UNIV. OF TURKU, 20014 TURKU, FINLAND. TEL. +358 (2) 333 6873. FAX +358 (2) 333 6860. E-MAIL PAERKA(A)UTU.FI, 2001, XP002261972 pages 152-153  DE 102 19 684 A (FRIEDRICH BUESE CONSULTING GMB ;UNTERNEHMENSBERATUNG REICHENAU (DE) 14 November 2002 (2002-11-14) claims 1,10  EP 0 880 902 A (NESTLE PRODUKTE AG) 2 December 1998 (1998-12-02) cited in the application the whole document  DE 202 02 562 U (ORTHOMOL PHARMAZEUTISCHE VERTR) 23 May 2002 (2002-05-23) claims 1,2

International Application No PCT/EP2004/006613

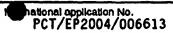
		PC1/EF2004/000013
C4Continus	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
•	MATSUMOTO M ET AL: "ADHESIVE PROPERTY OF BIFIDOBACTERIUM LACTIS LKM512 AND PREDOMINANT BACTERIA OF INTESTINAL MICROFLORA TO HUMAN INTESTINAL MUCIN" CURRENT MICROBIOLOGY, NEW YORK, NY, US, vol. 44, no. 3, 2002, pages 212-215, XP008024172 ISSN: 0343-8651 page 212 page 215	3

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Form PCT/ISA/210 (continuation of second sheet) (January 2004)

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### INTERNATIONAL SEARCH REPORT



Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)	7
This international Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	7
1. X Claims Nos.: 14-19(partly) because they relate to subject matter not required to be searched by this Authority, namely:	
Although claims 14-19 are directed to a method of treatment of the human body, the search has been carried out and based on the alleged effects of the compound/composition.	
Claims Nos.:  because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful international Search can be carried out, specifically:	
3. Claims Nos.:	
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box iii Observations where unity of invention is lacking (Continuation of item 3 of first sheet)	一
This international Searching Authority found multiple inventions in this international application, as follows:	
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.	
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	
Remark on Protest The additional search fees were accompanied by the applicant's protest.	
No protest accompanied the payment of additional search fees.	

## THE AVAILABLE COD

### INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No	
PCT/EP2004/006613	

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0231904	A	12-08-1987	DE AT DE	3603000 A1 63425 T 3770005 D1	06-08-1987 15-06-1991 20-06-1991
			EP GR	0231904 A2 3001950 T3	12-08-1987 23-11-1992
US 2002004527	A1	10-01-2002	AU CA	5533701 A 2405822 A1	30-10-2001 25-10-2001
			CN	1436048 T	13-08-2003
			EP	1272058 A2	08-01-2003
			JP	2004518609 T	24-06-2004
			WO	0178530 A2	25-10-2001
			US US	2003190363 A1 2002045660 A1	09-10-2003 18-04-2002
US 2003060509	A1	27-03-2003	WO	03017945 A2	06-03-2003
US 5374657	A	20-12-1994	AT	200619 T	15-05-2001
			AU	661297 B2	20-07-1995
			AU	1239292 A	27-08-1992
			BR CA	9205526 A 2101274 A1	19-04-1994 25-07-1992
			DE	69231793 D1	23-05-2001
			DE	69231793 T2	08-11-2001
			DE	568606 T1	25-02-1999
			DK	568606 T3	23-07-2001
			EP	1092352 A2	18-04-2001
			EP	0568606 A1	10-11-1993
			ES	2157898 T3	01-09-2001
			GR	3036139 T3 100733 A	28-09-2001 31-12-1995
			IL IL	114253 A	13-07-1997
			ĴP	2731035 B2	25-03-1998
			JР	6505153 T	16-06-1994
			MX	9200320 A1	01-10-1992
			NZ	241359 A	26-08-1994
			OA	10348 A	19-10-2001
			RU	2093996 C1	27-10-1997
			SG Wo	49307 A1 9212711 A1	18-05-1998 06-08-1992
			US	5550156 A	27-08-1996
			ZA	9200452 A	28-10-1992
US 2003017192	A1	23-01-2003	CA	2451411 A1	27-12-2002
			EP	1404185 A1	07-04-2004
			WO	02102168 A1	27-12-2002
EP 0904784	A	31-03-1999	EP	0904784 A1	31-03-1999
WO 0215719	A	28-02-2002	UA UA	9177701 A 9548801 A	04-03-2002 04-03-2002
			BR	0113367 A	29-07-2003
			BR	0113390 A	29-07-2003
			CA	2418285 A1	28-02-2002
			CA	2419026 A1	28-02-2002
			Un	CATOOCO VI	20 02 2002
			CN	1469712 T	21-01-2004

# BEST AVAILABLE COPY

## INTERNATIONAL SEARCH REPORT

**Uniformation on patent family members** 

Internation No PCT/EP2004/006613

Patent document ited in search repo	ort	Publication date		Patent family member(s)	Publication date
10 0215719	A		WO	0215720 A2	28-02-2002
			EP	1313378 A2	28-05-2003
			EP	1313376 A2	28-05-2003
			HU	0301475 A2	28-08-2003
			HU	0301586 A2	28-08-2003
			JP	2004506436 T	04-03-2004
			JP	2004506437 T	04-03-2004
			US	2003202992 A1	30-10-2003 18-04-2002
			US US	2002044988 A1 2002044957 A1	18-04-2002
US 20030772	55 A1	24-04-2003	NONE		
WO 02060276	Α	08-08-2002	FI	20010157 A	26-07-2002
			BR	0206689 A	03-02-2004
			CA	2434337 A1	08-08-2002
			CN	1487798 T	07-04-2004
			CZ	20031915 A3	14-01-2004
			ΕE	200300351 A	15-12-2003
			EP	1359816 A1	12-11-2003
			WO	02060276 A1	08-08-2002
			HU	0401017 A2	30-08-2004 19-08-2004
			JP NO	2004524836 T 20033283 A	24-09-2003
			US	20033263 A 2004062758 A1	01-04-2004
EP 1048226	Α	02-11-2000	EP	1048226 A1	02-11-2000
			AU	765986 B2	09-10-2003
			AU	4753500 A	13-03-2001
			BR	0010125 A	15-01-2002
			CA	2371696 A1	22-02-2001
			CN	1358067 T	10-07-2002
			WO	0111990 A1	22-02-2001
			NO	20015178 A	23-10-2001
			PL	351599 A1 6777391 B1	05-05-2003 17-08-2004
			US Za	6777391 B1 200108412 A	13-01-2003
DE 1021968	4 A	14-11-2002	DE	10219684 A1	14-11-2002
EP 0880902	Α	02-12-1998	EP	0880902 A1	02-12-1998
			AU	746520 B2	02-05-2002
			AU	8107798 A	30-12-1998
			BR	9809171 A	01-08-2000 03-12 <b>-</b> 1998
			CA	2288184 A1 9853702 A1	03-12-1998
			WO EP	0986312 A1	22-03-2000
			JP	2002514085 T	14-05-200
			NZ	500848 A	21-12-200
			ÜS	6787158 B1	. 07-09-200
DE 2020256	2 U	23-05-2002	DE	20202562 U1	23-05-200